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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/032,659 02/27/98 ANDERSON E P165

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LM02/1112

EXAMINER

ROSSI, J

ART UNIT

PAPER NUMBER

2772

DATE MAILED:

11/12/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/032,659

Applicant(s)
Anderson

Examiner
Jeffrey Allen Rossi

Group Art Unit
2772



☒ Responsive to communication(s) filed on Aug 9, 1999

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-13 is/are pending in the application.

Of the above, claim(s) NONE is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-13 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

1. This Office Action is responsive to the following communications: the amendment "a" of 8-9-99, in light of the application of the application of 2-27-98.

2. The disposition of claims is as follows:

1-13	pending
1,7,& 11	independent
1,7, &11	amended since filing
n/a	canceled
—	new
1-13	finally rejected
n/a	allowable subject matter

3. The current group art unit number of your case is 2772. The art unit is subject to change. so the art unit number on the most recent correspondence to you should be used to help us serve you in a timely manner.

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Brief Examiner's Interview

A brief discussion was had between Stephen G. SULLIVAN, reg. no. 32,329, for Applicant; and Jeffrey A. ROSSI, art unit 2772, for USPTO, on or around September 1, 1999.

Examiner clarified basis for requirement for legends. Attorney for Applicant requested that elements requiring legends be specifically itemized to assist Applicant.

Examiner pointed out that "portable" was not claimed. Applicant explained that the present application was part of a series of novel applications regarding loading functionality into digital cameras that until then had been deemed "impossible" by other companies because of their small size, the solution which was invented by Applicant. Applicant suggested "hand-held" and "portable" as possible descriptive terms of the crux of the invention to overcome prior-art rejections if they persisted.

If Applicant disagrees with the summary as presented by the Examiner, he is invited to provide his own account pointing out supposed errors in the examiner's understanding of the referenced conversation

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Drawings

4. The drawings are objected to because legends are not present in Figures 4-5, 7A-B, 8A-C, and 9A-B. Pursuant to 37 CFR 1.84-(o), Examiner requires legends or labels for all numbered elements, with careful attention to be made with respect to the addition of new matter.

Correction is required.

Requested Legends

Figure	Elements
4	410a-b, 411a-b, 412
5	422, 424, 406, 420
7A	409, 430, 402, 432, 412a-c
7B	430, 402, 409, 432, 412a-c
8A-C	all
9A-B	all except 413, 415

The examiner suggests tabularized legends, which are the most aesthetically pleasing. Labeled elements are acceptable as well. Please consult your professional draftsman, and/ or the USPTO draftsmen, at 703-305-8335; and/ or the examiner, for further assistance in this matter.

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Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski, European patent no 661,658 A2 07/1995 in view of Ogawa, U.S. Patent no. 5,198,851, 03/1993..

7. Per independent claim 1, Parulski discloses a method for controlling user interaction in a digital camera, the digital camera having a display the method comprising the steps of:

a) storing a directed image capture sequence comprising a set of electronic instructions ("the plan may be... recorded in electronic form on an instruction disk"—col. 3, lines 21-30);

b) executing the directed image capture sequence to display instructions on the display that prompt the user to perform specific operations (accessed through processor 12—3: 21-29; and

c) guiding the user through a series of related image captures ("instructions direct an operator, for example, to take four different poses"—col. 3, lns. 25-29).

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Parulski lacks an explicit recitation of "interactive instructions". Ogawa, on the other hand, demonstrates that it was notoriously well-known to provide interactive instructions, i.e., a script, in a cameras ("interactive communication with the camera, and the setting of the data pack"—1: 57-61, for taking pictures Figs. 2-7. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Ogawa with Parulski, by making Parulski's instructions interactive in processor 12 of Parulski, because interactive instructions would have been easier to follow.

Regarding the use of the claim language "related image captures", the Examiner had contemplated that if Ogawa alone would have had the feature "related image captures", since a user of Ogawa would have inevitably employed Ogawa to capture images that were related. However, upon careful examination of this claim, it became apparent that the Applicant explicitly claimed "related image captures" in conjunction with "instructions" which requires that the instructions somehow expressly relate to the capture of multiple images in order to preempt this claim.

Regarding the use of the terminology "script" it is believed that the interactive instructions themselves constitute a script. Even if Applicant disagrees with this premise, the instructions are evidence of an underlying script, because scripts were a notoriously well-known low level programming language to effect these types of operations.

2 Regarding dependent claim 2, Parulski and Ogawa demonstrate all elements as applied in the rejection of claim 1, *supra*. Per the limitation of "wherein step a) further includes the step of providing the directed image capture sequence by externally loading the program instructions

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into the digital camera", this is suggested by Parulski (disk drive 13, Figure 1; "instruction disk"—3: 22-25).

3 Regarding dependent claim 3, Parulski and Ogawa demonstrate all elements as applied in the rejection of claim 2, *supra*. Per the limitation of "wherein step a) further includes the step of providing the program instructions as a text-based script", this suggested by the observation that the Parulski's instructions are human readable. However, it is also noted that text based script programming languages, such as Java™, were notoriously well-known in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to employ a text based script in Parulski and Ogawa, because text based scripts are easily programmed by a novice, easy to understand, and have particular suitability to platform independence.

4 Regarding dependent claim 4, Parulski and Ogawa demonstrate all elements as applied in the rejection of claim 3, *supra*. Per the limitation of "further includes the step of executing the directed image capture sequence by interpreting the text-based script", it was notoriously well-known to interpret text based scripts to perform program instructions. Interpretation would have been obligatory in the above combination because digital processors do not "understand" text: they employ binary numbers.

8. Regarding dependent claim 5, Parulski and Ogawa demonstrate all elements as applied in the rejection of dependent claim 4, *supra*. Per the limitation of "wherein step c) further includes the step of prompting the user for specific information, and entering the specific information on a text entry screen", this feature is a well-known facet of interactive displays (interactive, meaning

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that some user input is required). Since this is a necessary part of the combination of Parulski and Ogawa, the method and motivation to combine are identical to that set forth in claim 1.

6 Regarding dependent claim 6, Parulski and Ogawa demonstrate all elements as applied in the rejection of dependent claim 5, *supra*. "Official notice is hereby taken that translucent overlay bars were notoriously well-known in the art of graphical user interfaces. It would have been obvious to one of ordinary skill in the art to provide a translucent overlay on the display screen 14 of Parulski, in order to conserve space, and thus reduce the size of the system of Parulski.

7 Per independent claim 7, Ogawa discloses a method for directing image capture sequences in a camera having a display, the method comprising the steps of:

- a) externally loading a script comprising program commands into the digital camera (see ic card 3, Fig. 1A);
- b) displaying the script as a menu item for selection by a user (Fig. 2, e.g., "user customization"—3: 65);
- c) in response to the user selecting the script menu item from the menu, passing operational control from the digital camera to a script interpreter (implicit, when the user is interacting with the script, the user is not interacting with the camera.;
- d) interpreting and executing each of the script commands, wherein a first plurality of the script commands are for displaying interactive instructions on the display requesting the user to perform specific camera operations, thereby guiding the user through a series of image captures (Figs. 2-9c, especially 9c);

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e) passing operational control from the script interpreter to the digital camera after the script has requested the user to capture an image ("...ic card which stores the information on the camera and transmits the information to the camera when required to set the operation of the camera—1: 41-43); and

While it is arguable whether Parulski *de facto* passes operational control from the camera to the script interpreter, this is suggested by Parulski, i.e., it would be counter intuitive to operate the camera while changes were being made to critical settings ("...ic card which stores the information on the camera and transmits the information to the camera when required to set the operation of the camera—1: 41-43). Nonetheless, it would have been obvious to one of ordinary skill in the art at the time of the invention to pass control between the camera and the script interpreter in order to prevent pictures from being taken while Ogawa's critical parameters were being changed.

Although Ogawa suggested "related images—Fig. 9c), it's instructions are not directed toward multiple images per se. Parulski, on the other hand, explicitly demonstrates electronic instructions for taking multiple images. It would have been obvious ton one of ordinary skill in the art at the time of the invention to combine Parulski with Ogawa, by employing scripts taught by Parulski, i.e., sets of instructions, for taking multiple related pictures, in order for example, to enable a user to take appropriate pictures for a personalized video game, as taught by Parulski—Abstract, and thus expand the applications of Ogawa. Regarding the limitation of "digital" camera, the benefits of digital technologies are notoriously well-known, such as portable picture formats, ease of enhancement by numeric DSP techniques, ease of programmability, and "instant" compatibility with computer hardware.

The Examiner remarks that the explicit recitation of "passing control from a digital camera to a script interpreter" implies theat the "script interpreter" is not part of the "digital

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camera". This is a question of semantics, since it depends on what one intends to include in the term "camera". The rationale behind the rejection, however, is largely unaffected by this observation, since it would have been obvious to one of ordinary skill in the art at the time of the invention to allow a user to take a picture by "passing control" to the camera, in order to allow a user to effect the operations (s)he was instructed to do. This was also a well-known tenant of modular programming, i.e., passing control from one module to another in order to allow modules to be changed without changing entire sets of programs.

8 Per dependent claim 8, Parulski and Ogawa demonstrate all claimed elements as applied in the rejection of independent claim 7, *supra*. Per the limitation of "wherein step a) further includes the step of loading the into the digital camera from a removable memory", this is suggested both by Parulski (disk 13, Fig. 1), and Ogawa: ic 3, Fig. 1A. This limitation provided the notoriously well-known benefit of changing program instructions.

9 Per dependent claim 9, Parulski and Ogawa demonstrate all claimed elements as applied in the rejection of independent claim 8, *supra*. Per the limitation of "operational control from the digital camera to the script after the user has captured the image" a similar argument is made to the "passing of operational control" in independent claim 7, *supra*. It would have been obvious to one of ordinary skill in the art at the time of the invention to pass control back to the script after capturing an image in order to allow for continued instructions, since multiple images are claimed..

9 Per dependent claim 10, Parulski and Ogawa demonstrates all claimed elements as applied in the rejection of independent claim 9, *supra*. Per the limitation of "wherein step f) further includes the step of passing operational control back to the digital camera after the script completes execution", it would have been obvious to one of ordinary skill in the art at the time of

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the invention to do this in order to allow a user to continue using the image device without the assistance of interactive help, in order to allow the user to do other things..

Per independent claim 11, Parulski demonstrates
an camera **20** (Fig. 1) for capturing image data ;
a memory coupled to the camera for storing the image data as captured
images **12** (Fig. 1);

a display for displaying a captured image **14** (implicit, a well-known feature of digital cameras as shown in Fig. 1);

means for externally loading an external script (Instruction book in electronic form—3: 20-25) comprising program commands into the memory (;

a processor **12** coupled to the camera and to the memory for controlling operation of the digital camera,

Parulski lacks an explicit recitation of "the processor including means for interpreting and executing each of the external script commands, wherein when the external script commands are executed, **interactive instructions** are displayed on the display requesting the user to perform specific camera operations, thereby guiding the user through a series of related image captures. Providing interactive instructions was notoriously well-known and additionally demonstrated by Ogawa Figs. 2-9c. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Ogawa with Parulski by providing interactive instructions on display 12 of Parulski. Scripts are an implicit part of interactive instructions, and thus an external script would have been the preferred method of combining Ogawa and Parulski. The rationale for combining Ogawa and Parulski has been elaborated in further detail in the rejection of claim 1, and therefore has been summarized here in order to avoid repetition.

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Per dependent claim 12, a script interpreter is a necessary component of employing scripts, and is suggested by Ogawa (see script, Figs. 1-9c), as was notoriously well-known in the art of interactive help..

Per dependent claim 13, the limitation of "a control program stored in memory and executed by the processor, the control program comprising,

means for displaying the script as a menu item on the display for selection by a user" is suggested by Ogawa (e.g., Figs 1-9c, ""user customization"—Fig. 3) as was notoriously well-known in the art of interactive menus.;

Per the limitation of "means for passing operational control to the script interpreter in response to the user selecting the script menu item from the menu", it would have been obvious to one of ordinary skill in the art at the time of the invention to do this in order to initiate a script, and interact with it.

More detail regarding the method and motivation for combining regarding these limitations has been set forth, *supra* in this action.

Response to Remarks

In the remarks, Applicant argues in substance that:

- a) (characterization of Parulski/ Ogawa)—page 4-5
- b) Neither Parulski nor Ogawa teach a system in which scripts are stored and executed within a portable device, such as the digital camera recited in the amended claims.
- c) Parulski does not include a display called for by the present invention

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d) Assuming a script was included on Ogawa's IC card, the script would not be transferred to or executed by the camera. Therefore, the scripts would not have been stored in the digital camera.

e) Applicants could find no teaching that Ogawa's instructions were interactively updated as recited in claim 1.

f) Ogawa would add nothing to Parulski, since Parulski would defeat the purpose of Ogawa's terminal device which (was?) to eliminate the use of the PC to exchange data with the camera.

g) Examiner did not point out no references where Java scripts are interpreted by a portable camera.

h) Examiner appears to misunderstand the meaning of the word interpreted (definitions given)

9. Applicant's arguments filed 8-9-99 have been fully considered but they are not persuasive.

Per a) the Applicants characterization of the references do not preclude a combination of teachings therein from rendering obvious to one of ordinary skill in the art at the time of the invention the claimed invention. The references are both directed to picture-taking cameras, and are combinable.

Per b), Applicant emphasized portable, which examiner concurs is a salient feature of the claimed invention. Nowhere does Applicant claim a portable camera. Even so, the PC of Parulski was "portable" as well as the claimed associated components. Nonetheless, please see examiners remarks under the remarks section regarding leveraging this feature of the Applicant's invention including similar suggested language in the claims.

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Furthermore, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "portable") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Per c), Ogawa includes display 6.

In response to applicant's arguments against the references individually, one cannot show non-obviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Per d), Ogawa's scripts were stored on a digital camera. In the abstract, Ogawa states "The terminal device includes an IC card for **storing** information on the camera...". Furthermore, the terminal device is part of Ogawa's camera, because it is connected by cord 4.

Per e) inter-activity is inherent in Ogawa's instructions, because they inherently allow multiple functions, and inter-activity is evidenced by keyboard 7. Furthermore inter-activity was well-known in instruction systems, and would have inherently been in the disclosure of Ogawa.

Per f) the rationale was based on a combination of teachings of Parulski and Ogawa, not a literal combination of the components employed in the rejection of the preferred embodiments of those two teachings. When placed together side by side, it would have been obvious to one of ordinary skill in the art to arrive at the claimed invention for the reasons stated. This argument mis-characterizes the rationale set forth, and therefore fails to provide a convincing argument negating that rationale.

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In determining obviousness, we must examine "*whether the teachings of the prior art, taken as a whole, would have made obvious the claimed invention,*" In re Gorman, 933 F.2d at 986, 18 USPQ2d at 1888, and "what the combined teachings . . . would have suggested to one of ordinary skill in the art,"

"We must look at the obviousness issue through the eyes of one of ordinary skill in the art and what one would be presumed to know with that background. What would be obvious to one of skill in the art is a different question from what would be obvious to a layman. An artisan is likely to extract more than a layman from reading a reference" In re Oetiker (CA FC) 24 USPQ2d 1443 (10/13/1992)

Per g), the well-known statement was over the notoriously well-known use of scripting languages such as Java™, not that it was well-known to use these in a portable camera.

In response to applicant's arguments against the references individually, one cannot show non-obviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "portable") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Per h), Examiner understands the difference between interpreted and compiled, and appreciates the definition provided to clarify the record. Firstly, Applicant has failed to point out how this "misunderstanding" relates to the rational set forth being invalid.

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Applicant bears burden of proof in rebutting prima facie case of obviousness In re Raynes (CA FC) 28 USPQ2d 1630 (10/26/1993).

Furthermore, the "flavor" of Java that is interpreted is frequently called Java script, and it was clearly Java and clearly a scripting language. There are multitudinous other examples of scripting languages, which were notoriously well-known at the time of the invention, too numerous to list herein.

Remarks

The examiner appears to be persuaded at this time that the addition of terminology such "portable" and "integral", or "hand-held" and "integral" would render these claims non-obvious over the combination set forth; however, it is unknown at this time whether the addition of these limitations would require further search and consideration. This is because at the crux of the claimed invention appears to have been the integration of the components and the hand-held nature of Applicant's digital camera, wherein the Ogawa reference was not "integral" and the Parulski reference was not "hand-held".

Prior-Art Made of Record Establishing State-of-the-Art

Pertinent to Applicant's Disclosure

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Applicant is reminded that "in amending in response to a rejection of claims in an application..., the applicant... must clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections" (See 37 CFR 1.111 (c))

US Patents

US 5,949,474 (Gerzberg) Please consider the entire patent, esp. Fig. 3A, pertaining to this digital camera when amending claims.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.



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Conclusion

12. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to

(703)-308-9051 (**formal** communications intended for entry)

Or:

(703)-305-9724 (**informal** communications labeled **PROPOSED** or **DRAFT**)


Hand-delivered responses should be brought to:

Sixth Floor Receptionist, Crystal Park II, 2121 Crystal Drive, Arlington, VA.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey ROSSI whose telephone number is (703) 308-5213 . The examiner can normally be reached on Monday - Friday from 0830 to 1630 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark POWELL, can be reached on (703) 305-9703.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.


MARK R. POWELL
SUPERVISORY PATENT EXAMINER
GROUP 2700

JR

November 8, 1999